Name:

Inventing a Heat Engine

Discuss & Invent

Discuss these questions and write your answers on a separate piece of paper.

- 1. Watch the video on the screen of the spinner and the candles. (The video is on Step 6.) Discuss what could be making that spinner move. Draw a picture to show what you think is going on.
- 2. Discuss: How could you use a paper heat spinner in a Chain Reaction machine? Draw a picture or describe what you could do.
- 3. Talk to your spinner. Figure out what sentence makes it spin the most. Why does that sentence work so well?
- 4. Discuss: The spinner spins in one direction when you lift the tower and the other direction when you lower it. Explain why that might be. Draw a picture to support your explanation.

Experimental Station

5a. Find the heat source at this station. Describe it: _____

Put the spinner here:	Let about 20 seconds pass, then notice what the spinner is doing. Write down your observations. Draw a picture if you want.
Next to the hot thing	After 20 seconds, I notice
Above the hot thing	After 20 seconds, I notice
Below the hot thing	After 20 seconds, I notice
	here: Next to the hot thing Above the hot thing Below the hot

- 5c. Did you find any spots where the spinner doesn't turn-or turns just a little? Where?
- 5d. Did you find a spot where the spinner turns steadily? Where? Does it turn at least 30 times?



before cars and planes?